DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-003934 Address: 333 Burma Road **Date Inspected:** 20-Sep-2008

City: Oakland, CA 94607

OSM Arrival Time: 2130 **Project Name:** SAS Superstructure **OSM Departure Time:** 830 Prime Contractor: American Bridge/Fluor Enterprises, a JV

Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Contractor: Location:** Shanghai, China

CWI Name: CWI Present: Yes Lin Yan Hua No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Oualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A **Approved Drawings:** Yes No N/A **Approved WPS:** Yes No **Delayed / Cancelled:** Yes N/A No

34-0006 **Bridge No: Component: OBG-PMT**

Summary of Items Observed:

Caltrans Quality Assurance (QA) Inspector, Mike Hasler was present to observe the fitup, welding and related activities associated with the fabricating of Caltrans Orthotropic Box Girder (OBG) and Tower, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

WBS Item Description **Status** Dwg No. 1 **PMT** NA NA Welding **OBG**

Bay 1: Caltrans QA inspector monitored OBG Production Monitoring Test (PMT) for deck panels DP416-001 and DP335-001. Visual inspection of tack welds and root gap was performed by ABF, ZPMC and Caltrans. The magnetic particle test (MT) of the tack welds was performed by ZPMC QC/MT inspector identified as Xu Hai. Caltrans QA inspector verified and documented the welding amperage, voltage and travel speed during the gas metal arc welding (GMAW) and submerged arc welding (SAW) process of welds 1 thru 6. At the completion of the GMAW root pass and SAW cover pass. The welds were visually inspected by ABF, ZPMC and Caltrans. Caltrans QA inspector witness ZPMC QC/UT inspector identified as Xue Hai Rong inspect the welds for depth of penetration and conformance. Caltrans QA inspector identified designated locations for macro sampling per contract requirements. The macroetch samples were evaluated with a 7X optical comparator and accepted by ZPMC, ABF and Caltrans. See Caltrans U-ribs PMT Inspection Sheet, dated 9-20-08 and ZPMC production monitoring test plate inspection report, dated 9-21-2008 for additional information. The following picture illustrates welding of the PMT and typical macroetch specimen identified as 4-5.

WELDING INSPECTION REPORT

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Summary of Conversations:

As identified with in the contents of this report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ady Velasco, 138-1694-2685, who represents the Office of Structural Materials for your project.

Inspected By:	Hasler,Mike	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer